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Federal Water Planning and Development

The role of the federal government is changing from one of construction and development to preservation, conservation and maintenance. Federal funding is decreasing while regulatory programs are increasing.

16.1 Introduction

Although the activities of federal agencies are changing, many programs are still available. To use them, local people must be informed on program functions and how to gain access. With this information, better interagency and local working relationships are possible. To this end, a brief description of the agencies' programs is given.

16.2 Background

With an increase in regulatory requirements and congressional attempts to balance the budget, gaps in both technical assistance and funding may occur. Frequently, federal requirements of higher standards for resource uses, without additional funds, add costs to state and local budgets. This reduces the state and local funds to implement water resource conservation and development programs.

16.3 Federal Programs

Various federal agencies and their programs are briefly described below.

16.3.1 Bureau of Land Management

The Federal Land Policy and Management Act gives the Bureau of Land Management (BLM) authority to inventory and comprehensively plan for all public lands and resources under its jurisdiction, including water. They are also responsible for managing the wilderness areas and wild and scenic and recreational rivers. None of these, however, are on BLM land in the Utah Lake Basin.

Water resources are rapidly becoming a major determinant of resource management alternatives. Quality and quantity of water are now major elements of

resource management plans (RMP) as BLM manages riparian habitats of streams, lakes, reservoirs and ponds. After public participation, RMPs become management plans for resources on BLM land. The published Record of Decision for the Pony Express and Rangeland Program Summary for Utah County is an example of methods used by BLM to dispose of lands for public purposes, i.e., landfills. Public lands in Tooele, Utah and Salt Lake counties are within the BLM's Salt Lake District and are administered by the Pony Express Resource Area.

16.3.2 Bureau of Reclamation

Four broad categories of water resources programs are administered by the Bureau of Reclamation. They are investigation, research, loans and service, all requiring close cooperation with the concerned citizens.

Investigation Programs - General investigations are conducted for single and multi-purpose water projects. Environmental assessments are usually included.

Research Programs - Reclamation conducts research on water project design, construction and materials. Research is also carried out on atmospheric management, as well as geothermal and solar power. Most programs are conducted in cooperation with other entities. In 1981-82 the bureau studied the feasibility of hydroelectric generation of peaking power with a pumped storage facility at Utah Lake. Feasibility of this site was less than at six other sites eventually selected for further study.

Loan Programs - These programs have provided federal loans to qualified organizations wishing to construct or improve smaller and generally less complex water resources development. Reclamation has recently

reassessed its loan programs and concluded that they need major re-direction. As a result, Reclamation is no longer accepting applications for loans.

Service Programs - These programs are designed to provide data, technical knowledge, and expertise to state and local government agencies. They aim to avoid duplication of special service functions. Local governments pay for these services.

Project Construction - The Bureau of Reclamation is phasing out its project construction programs. Construction of Jordanelle Dam and Sixth Water Aqueduct are the final major projects for the bureau in Utah. The Central Utah Project Completion Act transferred authority for constructing remaining elements of the project to the Central Utah Water Conservancy District.

16.3.3 Cooperative State Research, Education, and Extension Service

This new agency is assigned responsibility for all cooperative research programs presently performed by the Cooperative State Research Service. It is also assigned all cooperative education and extension programs presently under the Extension Service.

16.3.4 Corps of Engineers

If local entities are unable to deal with a large water resources problem, they may petition their congressional representatives for Corps of Engineers (COE) assistance under the Civil Works-General Investigation Authority. They may request assistance with smaller problems directly from the local COE office under the Continuing Authority Program. This allows the COE to investigate the economic, technical, social and environmental acceptability of remedial measures. When the directive covers an entire river basin, the COE studies it as a unit and prepares a comprehensive plan. Close coordination is maintained with local interests, the state and other federal agencies.

Numerous water resource studies have been conducted and several projects built within the basin. Recent studies include the Wasatch Front and Central Utah Investigation, authorized by Congress and completed in 1984. Smaller studies include Rock Canyon in 1986,

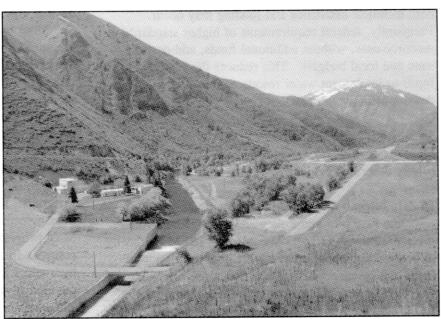
and the Provo River in 1988. A reconnaissance investigation of the Provo River and east side drainages within Provo City is currently ongoing to decide if the COE can assist in reducing the threat of flooding.

The Corps of Engineers, in cooperation with the Bureau of Reclamation and the Central Utah Water Conservancy District, has established specific operating criteria for Jordanelle Dam during periods of high runoff and flooding. Under this authority, known as Section 7, the COE also monitors the operation on a real-time basis.

The COE also has emergency assistance authorities. It has had several emergency projects within the basin, primarily on Utah Lake/Provo River and at Thistle. Requests for emergency assistance should be made through the state's Division of Comprehensive Emergency Management.

16.3.5 Environmental Protection Agency

Environmental Protection Agency programs include safe drinking water under the Safe Drinking Water Act and water pollution control under the Clean Water Act. The Safe Drinking Water Act increased the number of regulated drinking water contaminants, added new required treatment methods and made other revisions. Congress re-authorized the act with amendments that



Provo River below Deer Creek Reservoir

created several new programs. Important aspects of the Clean Water Act include: National Pollutant Discharge Elimination System (NPDES) and Section 402,

regulating the discharge of point sources of pollutants to waters of the United States.

Construction grants originally provided funds for construction of needed municipal wastewater treatment facilities. It was phased out in 1990 and replaced with a revolving loan fund managed by the states.

Water quality management planning and non-point source pollution control, Section 604(b), provides funds to states to carry out water quality management planning. Section 319 of the act authorizes funding for implementation of non-point source pollution control measures under state leadership.

16.3.6 Farm Service Agency

The Farm Service Agency (FSA - formerly the Agricultural Stabilization and Conservation Service) administers farm commodity, crop insurance, and conservation programs for farmers and ranchers. As of October 1995, FSA also administers the farm ownership and operating loans formerly provided by the Farmers Home Administration.

The FSA's conservation programs include the Agricultural Conservation Program (ACP), the Emergency Conservation Programs (ECP), and the Conservation Reserve Program (CRP). The ACP is designed to reduce soil erosion, mitigate water pollution, protect and improve the condition of cropland and pastures, conserve water, and preserve and enhance wildlife habitat. Where possible, it encourages the conservation of energy. Projects are evaluated at the local level on a case-by-case basis to determine consistency with the overall ACP objectives. State and county committees, made up of local farmers and ranchers administered the ACP program.

The ECP provides emergency cost-share funding for a number of farm-related disasters that include, but are not limited to, excessive wind erosion, floods and extended periods of extreme drought conditions. The CRP was established to encourage farmers through contracts and annual payments to reduce soil erosion. In addition, CRP eligibility has been expanded to promote the preservation and maintenance of wetlands, wildlife habitat, and water quality.

The USDA's Natural Resources Conservation Service and Forest Service, along with the Utah Division of Forestry, Fire and State Lands provide technical program guidance. The Utah State University-Cooperative Extension Service provides educational support.

16.3.7 Federal Emergency Management Agency

Federal Emergency Management Agency (FEM.) programs are directed to disaster preparedness, assistance and mitigation. They provide technical assistance, loans and grants.

Presidential Declared Disaster - After the president declares a major disaster, usually following a governor's request, grants are available to state and local governments for mitigation.

Assistance Grants - The FEMA can provide matching grants to help the state develop and improve disaster preparedness plans, and develop effective state and local emergency management organizations. Grants are also available to develop earthquake preparedness capabilities.

Flood Plain Management - The FEMA provides technical assistance to reduce potential flood losses through flood plain management. This includes flood hazard studies to delineate flood plains, advisory services to prepare and administer flood plain management ordinances, and assistance in enrolling in the National Flood Insurance Program. The FEM. can also help with the acquisition of structures in the flood plain subject to continual flooding.

16.3.8 Fish and Wildlife Service

The Fish and Wildlife Service (FWS) carries out the mandates of the Endangered Species Act, Fish and Wildlife Coordination Act, Clean Water Act, Eagle Protection Act and Migratory Bird Treaty Act. No land or water areas in the basin are directly managed by the FWS.

The FWS compiles lists of animal and plant species native to the United States that are being reviewed for possible addition to the List of Endangered and Threatened Species. Such species are generally called "candidate species." Candidate species are those for which the FWS has sufficient information on biological vulnerability and threats to support addition to the list. Species considered threatened or endangered that occur in the Utah Lake and Jordan River basins are given in Table 16-1. These lists change over time as other species are added when they become threatened or are removed when they recover. When any activity is planned which may affect a threatened or endangered species, it is the responsibility of the sponsor to take actions to protect them.

When right-of-way permits are required on federal lands, the consultation requirement under the Fish and Wildlife Coordination Act is actuated.

	Table 16-1 CANDIDATE AND LISTED SPECIES	
Candidate Species	Listed Species	Category
Deseret milkvetch	June sucker	Endangered
Mountain plover	Peregrine falcon	Endangered
Spotted frog	Least chub	Endangered
	Whooping crane	Endangered
	Bald eagle	Threatened
	Clay phacelia	Endangered
	Ute ladies-tresses orchid	Threatened
	Utah valvata snail	Endangered

If federal funds are involved, Section 7 consultation with the FWS is required by the Federal Endangered Species Act (also see Section 14 of this basin plan). Any action that is authorized, funded or carried out by a federal agency is also subject to Section 7 Consultation. Section 404 permitting under the Clean Water Act, as administered by the Corps of Engineers, calls for the FWS to respond on impacts to wetlands and on threatened or endangered species. Under the Migratory Bird Treaty Act, all birds are protected except starlings, English sparrows and pigeons. The Endangered Species Act also prohibits the "taking" of a protected species. Any unpermitted activity on any land that results in "take" of federally listed species constitutes a violation of Section 9 of the Endangered Species Act. "Take" means harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or attempting to engage in any such conduct. This can include significant habitat modification or degradation where it kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

16.3.9 Forest Service

Water-related programs of the Forest Service include watershed management; special use authorization for water development projects; and coordination with local, state and federal agencies. They also manage 56,750 acres of wilderness areas on national forest lands.

Watershed Management - Watershed protection

insures that activities do not cause undue soil erosion and stream sedimentation, reduce soil productivity or otherwise degrade water quality. Water yields may be affected primarily through snowpack management because of timber harvest using well-planned layout and design. Potential increases may approach one-half acrefoot per acre for some treated areas, but multiple-use considerations and specific onsite conditions may limit actual increases.

Special Use Authorization - Construction and operation of reservoirs, conveyance ditches, hydropower facilities and other water developments require special use authorization and an annual fee. Authorization contains conditions necessary to protect all other resource use. Coordination of water developments by others requires communication early in the planning process to guarantee environmental concerns are addressed. The Forest Service has prepared a *Resource Management Plan* along with a Monitoring and Evaluation Program for the Uinta National Forest.

16.3.10 Geological Survey

The U.S. Geological Survey (USGS), through its Water Resources Division, investigates the occurrence, quantity, distribution, and movement of surface and groundwater. It also coordinates federal water data acquisition activities. This is accomplished through programs supported by the USGS independent of, or in cooperation with, other federal and non-federal agencies. The USGS is responsible for the National

Water Quality Assessment (NAWQA). The goal of the assessment is to describe the status of the nation's waters and trends in quality parameters. The Great Salt Lake Basin NAWQA was started in October 1996.

The USGS cooperates with various state and local agencies in cost sharing for collecting hydrologic data. Programs include water quality and water level changes in the Utah Lake Basin aquifers. They also read and evaluate surface water stream gages.

16.3.11 Natural Resources Conservation Service

The Natural Resources Conservation Service (NRCS) provides technical and financial assistance to conserve soil, water, and related resources on nonfederal land through local soil conservation districts. In addition to working with individual landowners and units of government, the NRCS administers the following programs.

Published soil surveys - These contain descriptions of an area's soils, their uses and management, and maps depicting the extent of these soils. The surveys give information about non-federal lands.

Snow survey program - The NRCS measures snow water equivalent and precipitation at four locations ranging in elevation from 7,160 feet to 9,960 feet. These data are available to the public electronically. Basin outlook reports that compare current snowpack, precipitation and reservoir storage to monthly and annual averages are published monthly, along with stream flow forecasts.

River basin studies - Technical and financial assistance for watershed protection and flood prevention and the emergency watershed protection program were all authorized by the Small Watershed Protection and Flood Prevention Program (PL 83-566). The emergency watershed protection program provides immediate technical and financial assistance to relieve hazards to life and property resulting from conditions created by natural disasters.

Watershed protection and flood prevention projects (PL-566) - Two have been completed for the American Fork-Dry Creek Watershed in Utah County and the Miller-Biglow watershed near Nephi. The Santaquin Pilot Watershed Project has also been completed in Summit Creek near Santaquin. A watershed work plan has been prepared for Heber Valley in Wasatch County as part of the Tri-Valley Watershed Project. Applications for PL-566 projects

for southern Utah County and Salt Creek in Juab County are being prepared.

Resource Conservation and Development project(RC&D)- An application for an RC&C project has been pending since 1978 for the Mountain Lands planning area. The application was updated in 1992, and interest has been expressed in several projects. East Juab County is part of the Panorama Land RC&D which is based in Richfield, Utah. The following projects are being assisted in the Nephi area: Landscape Development Plan, Juab Fairgrounds Study, Agriculture Diversification Study, and a Target Industry Study.

Significant changes in program titles and agency missions have occurred as a result of the 1996 Farm Bill. Anyone needing assistance from U.S.D.A. Programs should contact the NRCS for current information.

16.3.12 Rural Development

Rural Development is authorized to provide financial assistance for water and waste disposal facilities in rural areas and towns of up to 10,000 people. Priority will be given to public entities in areas smaller than 5,500 people to restore, improve or enlarge a water facility through the Rural Utilities Service. To be eligible for loan and grant funds, water or waste disposal systems must be consistent with state or political subdivision's development plans and regulations. Rural Development also makes loans for resource conservation and development projects.

16.3.13 Utah Reclamation Mitigation and Conservation Commission

A major impetus for the CUPCA was the awareness that prior mitigation efforts had lagged behind project construction or were inadequate when measured against modern environmental standards. It was the intent of Congress to balance the mitigation debt within Utah resulting from such development by establishing the Utah Reclamation Mitigation and Conservation Commission (URMCC) and its program. The URMCC was created in part to provide the opportunity to design and implement a comprehensive and integrated program for mitigation of impacts and for protection of resources rather than having mitigation responsibilities spread among different agencies.

16.4 Federal Concerns

Federal agencies identified four concerns in the 1990 State Water Plan. All apply to the Utah Lake

Basin. These concerns were: (1) Reserved water rights, (2) interrelated planning, (3) stream and riparian habitat loss, and (4) water right filings. The agencies have made progress on all these concerns.

One other concern has been raised since the *State Water Plan* was published. This is the lack of coordination between federal, state, and local officials during planning and implementation of various programs. Improving the management of Utah Lake is an example. The inability of agencies at all levels to agree on a process for pursuing the common goal resulted in no action being taken. More can be done to promote better working relationships between local, state and federal jurisdictions. *